

**Amendments to the Claims:**

- 1 1. **(currently amended)** A coolable ~~Coolable~~ housing jacket (1) for an electric motor,  
2 which is manufactured as a cast moulded part, is formed for receiving a concentric  
3 internal rotor/stator arrangement (23) together with windings and winding overhang (24)  
4 with a through-passage (3) that is symmetrical, concentric and/or coaxial with respect to a  
5 hypothetical motor axis of rotation, and which is penetrated by one or more cooling  
6 channels (2, 2a-h) to form a coolant circuit, characterised by a coating of the jacket inner  
7 faces including the channel internal walls via a cathodic dip-varnishing process ~~or other~~  
8 dipping process.
  
- 1 2. **(currently amended)** A housing ~~Housing~~ jacket according to claim 1, characterised in  
2 that the coating thickness is between 10 µm and 50 µm.
  
- 1 3. **(currently amended)** A housing ~~Housing~~ jacket according to claim 1 ~~or 2~~,  
2 characterised by the use of a dipping varnish with a basis of epoxyaminourethane,  
3 preferably deposited by a cathophoretic process.
  
- 1 4. **(currently amended)** A housing ~~Housing~~ jacket according to claim 1 ~~one of the~~  
2 ~~preceding claims~~, characterised by the manufacture of the jacket body from aluminium.
  
- 1 5. **(currently amended)** A housing ~~Housing~~ jacket according to claim 1 ~~one of the~~  
2 ~~preceding claims~~, characterised in that the cooling channels (2) end with apertures freely

3 accessible on the outside opening on to at least a first (5a) of plural housing jacket end  
4 faces (5a, 5b).

1 6. **(currently amended)** A housing Housing jacket according to claim 5, characterised in  
2 that in a second of the housing jacket end faces (5a, 5b) the cooling channels (2) end at a  
3 housing wall formed by casting and are thus closed in a sealing-tight manner with respect  
4 to the outside.

1 7. **(currently amended)** A housing Housing jacket according to ~~one of claims 5 or claim~~  
2 6, characterised in that the housing jacket end faces (5a, 5b) comprise two end faces  
3 which are remote from one another and/or parallel to one another, the cooling channels  
4 (2) in the first (5a) of which end freely accessibly on the exterior, and the cooling  
5 channels (2) in the second (5b) of which end at a housing end wall (6) formed by casting  
6 and are thus closed in a sealing-tight manner to the exterior.

1 8. **(currently amended)** A housing Housing jacket according to claim 6 ~~or 7~~,  
2 characterised in that the second (5b) housing jacket end face (6) or end wall formed by  
3 casting abuts the remaining housing jacket body in an integral manner.

1 9. **(currently amended)** A housing Housing jacket according to claim 7 ~~or 8~~,  
2 characterised in that the second (5b) housing end wall (6) formed by casting is provided  
3 inside with cavities such that they form deflection chambers and/or transverse ducts (14),  
4 which communicate with the cooling channels (2), extend transverse to a hypothetical  
5 motor axis of rotation, and join together the channel ends and/or the deflection chambers.

- 1    10. (currently amended) A housing Housing jacket according to one of the preceding  
2    claims, but at least claim 6, characterised in that the housing jacket end face (6) formed  
3    by casting and sealing the cooling channels (2) has in its cast wall one or more bores (15)  
4    or other perforations.
  
- 1    11. (currently amended) A housing Housing jacket according to claim 10, characterised  
2    in that the bores or perforations have a female thread for the fixing of casting core  
3    holding elements and/or for receiving screw-type seals (16).
  
- 1    12. (currently amended) A housing Housing jacket according to claim 11, characterised  
2    in that the screw-type seals (16) are provided with sealing rings.
  
- 1    13. (currently amended) A housing Housing jacket according to claim 10, ~~11 or 12~~,  
2    characterised in that the bores (15) or perforations are formed as inlets or outlets (7, 11)  
3    for coolant and communicate with the cooling channels, optionally via a deflection  
4    chamber and/or transverse duct (14).
  
- 1    14. (currently amended) A housing Housing jacket according to claim 5 one of the  
2    preceding claims, characterised in that at least on a first housing jacket end face (5a)  
3    fixing elements (18), e.g. ~~female threaded bores~~, are provided in order to mount a cover,  
4    e.g. an end shield or pressure ring (17).